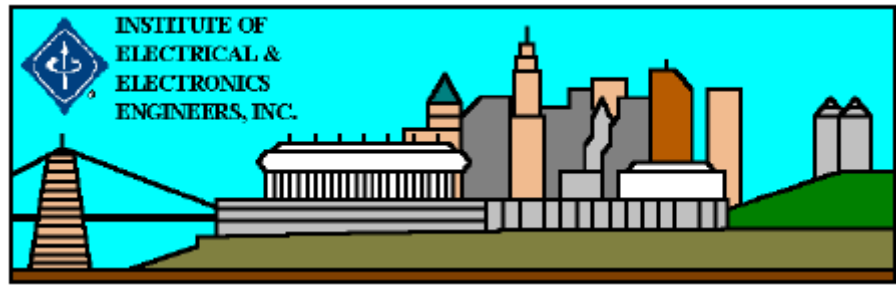


IEEE CINCINNATI
SECTION
NEWSLETTER
APRIL 2001



APRIL MEETING

THE COMMUNICATION CONNECTION

DATE : Thursday, April 26, 2001

PLACE : Evendale Buffet, 10784 Reading Road

TIME : 5:30 p.m. to 7:00 p.m.- Social Time/Dinner
7:00 p.m. to 8:30 p.m - Program

Please call the Cincinnati Section Voice Mailbox at 513-629-9380, by **Noon, Tuesday, April 24, 2001** if you plan to attend. Please leave your **Name, IEEE Member Number**, and **a daytime telephone number**.

The Evendale Buffet offers a wide selection of entrees, salads, soups, side dishes and desserts all for the price of \$11.00 per person, which includes soft drinks/coffee, tax & gratuity. There is also a bar available for the purchase of alcoholic drinks. It is located at 10784 Reading Road, approximately 1 mile north of Glendale-Milford Road on the east side of Reading across from Furrows. Take I-75 to the Glendale-Milford Rd. Exit, go east on Glendale-Milford Road approximately 3/4 of a mile to Reading Rd. and turn left on Reading.

ABOUT THE MEETING: One of the greatest needs of an engineer, computer scientist or other technical professional is the ability to communicate effectively, especially with large audiences. Although various speaking assignments may cause an uncomfortable feeling, the application of several fundamental principles of public speaking can minimize nervousness, build speaker confidence, and improve results for greater success.

The most important step in preparing a presentation is to analyze the audience and design the type of presentation for their benefit. Start with an outline and move ideas around on a word processor to build a logical flow of information.

Then, develop visuals from the major points of the outline. The proper use of visuals improves audience interest and retention. Blackboards, flipcharts, videotapes, and overhead slides are appropriate for small, informal groups. For larger and more formal groups, Elmo projections systems, 35-mm slides, projected personal computers, and a large screen are more effective and professional.

Advancements in multi-media personal computers offer new and exciting methods of communication to small and large audiences. These systems bring a new dimension in audio/visual options and will continue to grow in popularity. It is important to use these multi-media systems to improve communications and not to be a barrier to delivery of the message by distracting the audience with fancy electronic demonstrations.

Rehearsing ideas to be included in the first few minutes results in greater speaker confidence and puts the audience in a more receptive mood. Adding humor, changing voice speed and volume, using physical movement, and innovative ideas add interest and style.

Many skills bring more success in a lifetime career. Continuing education, productive work habits, interpersonal skills and the ability to balance time between many responsibilities are all important. However, the true test of a professional is not only their knowledge, but also their ability to effectively communicate that knowledge to others.

This presentation defines the most important principles of public speaking and demonstrates how to design and deliver effective oral presentations. Various visual aids are demonstrated as examples of how to be more successful as a public speaker. It was developed by an experienced engineer to help engineers and other technical professionals learn how to reduce nervousness, build confidence, and develop oral communication skills to enhance successful careers.

ABOUT THE SPEAKER: Our speaker, Mr. Jim Watson, is President of Watson Associates. He received a Bachelor's Degree in Electrical Engineering from Purdue University and is a Registered Professional Engineer, a Senior Member of IEEE, Region 2 IEEE-USA SPAC Coordinator, Ohio University IEEE Student Branch Mentor, a national S-PAC and M-PAC speaker, an IEEE Distinguished Lecturer, and a member of ECE Industrial Advisory Committee for Youngstown State University.

Following a 36-year career with Ohio Edison Company, an electric utility company in which he held numerous engineering and staff positions, Jim left to devote full-time to his consulting activities. Founded in 1989, Watson Associates provides consulting services in communication and management skills. He is the author of the WRITETALK designed to incorporate communication skill development and exercises within the university engineering curriculum. Watson Associates has directed the use of this communications program at several major Universities including California State University - Northridge, Lehigh University, Ohio University, Temple University, and The University of Toledo.

Jim recently received the IEEE Third Millennium Metal for his outstanding contribution to student career development activities. He has received numerous other awards from IEEE in recognition for his volunteer activities associated with professionalism. He has also published several articles on this topic in IEEE Potentials, HKN Bridge, Wireless Systems Design and other national magazines.

Jim has provided more than 1,350 presentations in 45 states, District of Columbia, 3 Canadian Provinces, Hong Kong, Puerto Rico, and Switzerland to a total audience of over 70,000. This includes presentations at 208 Student Professional Awareness Conferences (S-PACs) and more than 500 additional student meetings to a total audience of over 36,000 students.

TO SUBSCRIBE TO THE ELECTRONIC NEWSLETTER

This newsletter is only available via e-mail or the Section's web page at <http://ieeescincinnati.fuse.net/> with the exception of new Section members (one issue only) or members who have specifically requested a copy be delivered through the U. S. Mail.

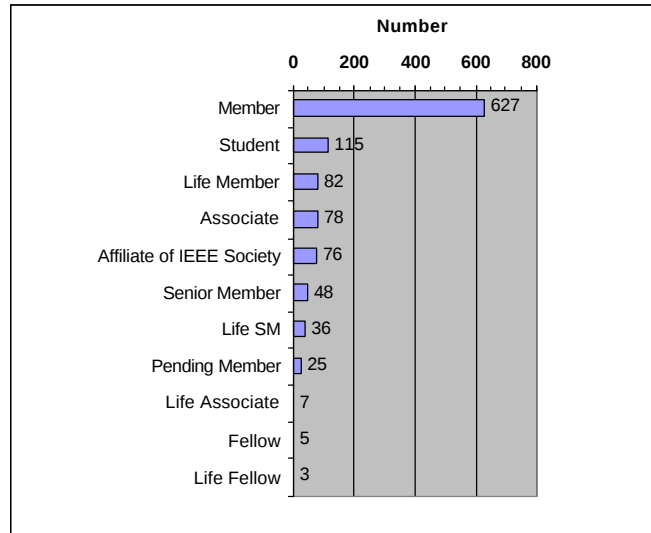
If you are a new Section member and would like to get this newsletter electronically, please contact Bob Morrison (Editor) at 513-287-3697 or by e-mail at j.r.morrison@ieee.org. Provide your name and member number. In case there are questions, please include a daytime telephone number as well.

If you would like the "Snail Mail" version, you must contact Bob Morrison via the above means or call the Section's voice mail at 513-629-9380.

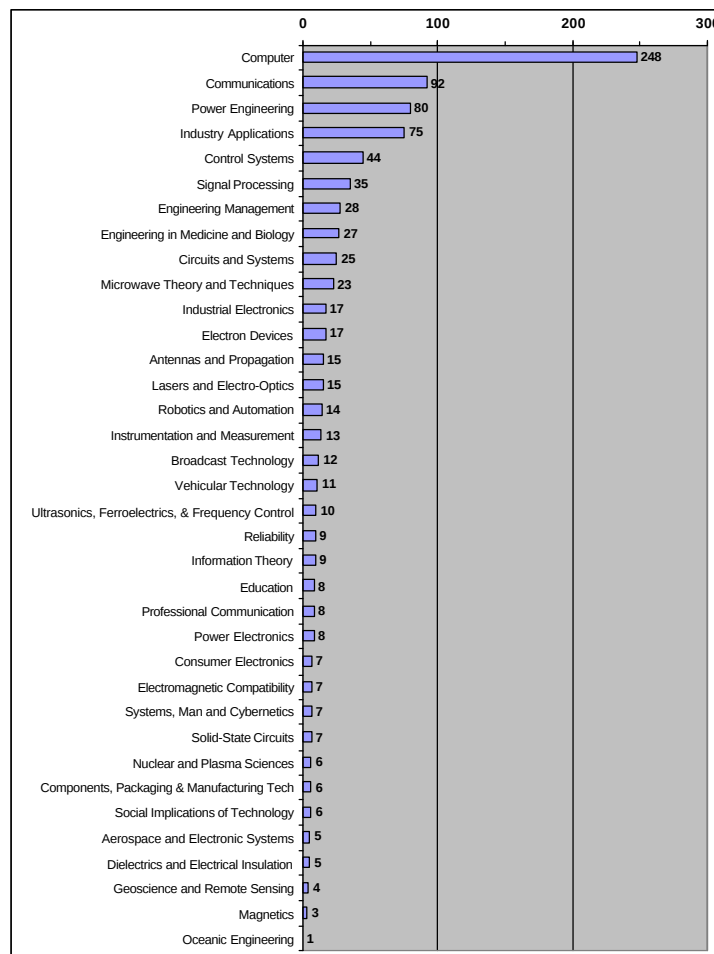
CHAIR'S MESSAGE

by Tom Grau, Section Chair

The Executive Committee of the Cincinnati Section of the IEEE, as part of its planning and committed Mission to better serve our membership and their Societies, has undertaken an analysis of the Section's membership statistics. It is our hope that by better understanding your interests, we can bring to you programs that are aligned with your interests.



There are 1102 active IEEE members and affiliates residing within boundaries of the Cincinnati Section. We are certainly very pleased to see such a large student group represented in the statistics which goes hand-in-hand



with one of our objectives (reported last month) to support and enhance Section involvement in student chapters. Another important statistic that jumps out at you is the large representation of people in the “life” groups. Combining the three “life” groups, there are 121 IEEE members who have demonstrated a long-standing interest in the Institute; indeed, a valuable resource.

We also sorted the data on membership in IEEE Societies and show strong support for most of the 36 Societies. Among the Section membership, 393 people belong to at least one society; many belong to more than one society with one person belonging to eleven societies. (This chart is presented for information purposes; no further explanation is needed.)

UPCOMING SECTION MEETINGS AND TOPICS

April 19, 2001	Executive Committee Meeting - Evendale Buffet
May 2001	Section Meeting - Harris HDTV Tour
Sept. 2001	Section Meeting - Tour of Kings Island

Topics are tentative at this time. Detailed information about the Section Meetings will be included in that month's newsletter. If you are interested in attending an Executive Committee Meeting, please contact either Tom Grau (513-899-3181, tag-inc@mindspring.com) or Jack Beckmeyer (513-353-3834, j.beckmeyer@ieee.org).

NEW MEMBERS

The following individuals are IEEE members who are new to our Section:

JASON S. BAILEY	MICHAEL Q. DOZIER	CRAIG A. SANDERS
WILLIAM T. BRUNGS	DANIEL G. GEORGIEV	JIE SITU
MALOLAN CHETLUR	SHAWN L. KELLY	LORA D. SMITH
ARVIND CHOKHANI	SHANKAR R. KRISHNAKUMAR	TAN TRAN
QINGBIN CUI	GREGOR N. PURDY	VIETLY H. VU
FERNANDO J. D'AMATO	ALBERT J. SAENZ	MARK D. WATSON

We wish to extend our welcome to all of our Section's new members!!!

ATTENTION Retired Engineers and Scientists! ***Consider RESC Activities !***

The **Retired Engineers and Scientists of Cincinnati – RESC** for short – invite those with **technical backgrounds** who are **retired** and would like to **share good fellowship** while **pursuing interests** in technology, community, history and nostalgia, travel, and business or industry developments.

Activities include monthly luncheon meetings, periodic plant tours, and golf in season.

VIEW THE FULL SCHEDULE AT: <http://home.fuse.net/Engineering/RESC.htm>

Luncheon meetings are held on the third Tuesday of each month from October through May, usually on the lower level of the Unity Center, 1401 McMillan Ave. (via side entrance on Grandview Ave.)

NEXT MEETING

Tuesday, March 20 Luncheon meeting at Unity Center - Reservations (\$9.00)
11:30 AM required by April 11.

Program: **Egypt - Cruising Up the Nile**
Speakers: **Fae Audre Rice & Harold Rice**, retired Science Teacher and Electrical Engineer respectively, and RESC members, will describe the wonders of ancient kingdoms along the Nile from Alexandria to Abu Simble, including Valley of Kings, Valley of Queens, and the many temples, as well as the Pyramids and Sphinx at Gizeh.

PLANT TOUR **Tour of Cintas - "The Uniform People" - facilities**
Wed., April 18 Mason, Ohio -- Reservations required by April 11
Contact Al Costantin (513) 624-9445

Witness the manufacturing and processing of uniforms of many types with automated pattern cutting, custom tailoring, and multi-head embroidering of logos. View the immense warehouses and how orders are processed.

AFTER TOUR, Drive to Lone Star Steak House in Mason for Lunch

RESERVATIONS & INFORMATION available by telephoning RESC contacts at either:
(513) 231-7831 or (513) 751-8035

Information also on web at <http://home.fuse.net/Engineering/RESC.htm>

**University of Cincinnati
OMI College of Applied Science
Electrical & Computer Engineering Technology**

The ECET department has need for part-time instructors for both day and evening classes for all areas of electrical and computer engineering technology. These include: circuit analysis, analog and digital electronics, communications, microprocessors, computer systems, computer networks, PLC's and control systems.

Classes are offered on a quarter schedule. Evening classes meet one night per week for 3 hours. Lecture class instructors usually also teach the laboratory class which meets on a second night.

Applicants should have a minimum of bachelor's degree in electrical or computer engineering or engineering technology, or closely related fields, along with industrial experience.

Interested persons should contact: Dennis Farrell
Department Head, ECET
University of Cincinnati
2220 Victory Pkwy
Cincinnati, OH 45206

Phone: 556-6558
Email: farrell@mozart.cas.uc.edu

Employment will be consistent with the university's equal opportunity, non-discrimination guidelines and other employment policies.

Scanning the Past: A History of Electrical Engineers from the Past

The following is taken from the IEEE publication, "Scanning the Past" which covers a reprint of an article appearing in the Proceedings of the IEEE Vol. 79, No. 7, July 1991

Walter R. G. Baker and the Advent of Commercial Television in 1941

It was fifty years ago this month that commercial monochrome television broadcasting was introduced in the United States. On July 1, 1941, station WNBT, with facilities in the Empire State Building in New York City, transmitted the first officially sanctioned commercial. It took the form of an image of a Bulova clock that remained on the screen for sixty seconds and cost the sponsor four dollars.

Walter R. G. Baker, who worked for the General Electric Company and served as chairman of the National Television System Committee (NTSC), played a major role in the resolution of conflicting views that enabled the television industry to reach this important stage of development. The NTSC standards that have lasted to the present day included a 525 line picture with interlaced scanning at 30 frames per second and a channel bandwidth of 6 MHz. The Federal Communications Commission (FCC) had approved the recommended standards and issued specific rules for operation in April 1941. Baker presided over the NTSC from July 1940 to March 1941 and also served as chairman of a second NTSC that formulated standards for color television in the early 1950's.

Baker was born in Lockport, New York, in 1892 and graduated in electrical engineering from Union College in Schenectady, New York, in 1916. He received a Master's degree in EE, also from Union College, in 1919. He took a job with General Electric (GE) in 1916 and worked on radio apparatus for military applications during the first World War. As a member of the radio engineering department at GE during the early 1920's, he contributed to the design of radio broadcast transmitters including station WGY in Schenectady. From 1924-1929, he had administrative responsibility for radio products manufactured by GE. In 1929, he was selected to be production manager for a Radio Corporation of America manufacturing plant in Camden, New Jersey, but he returned to GE in 1935 as the manager of its radio-television facility in Bridgeport, Connecticut. He was named a GE vice president in 1941.

Baker also served as director of the engineering department of the Radio Manufacturers Association (RMA) in the 1930's. The RMA established two television committees to prepare reports on standards and frequency allocation for FCC hearings held in June 1936. Donald G. Fink has described the work of these two committees as being "the first major step in television standardization in the United States." Several of their recommendations-including those for channel width, aspect ratio, and frame rate-survived as part of the NTSC standards adopted in 1941. The 441 line picture recommended by the RMA committee in 1936, however, was changed upward to 525 lines by the NTSC.

In the face of disagreement among RCA and its competitors, including Zenith, Philco, and Dumont, over proposed standards, the FCC in May 1940 announced that it would be prepared to authorize full commercialization of television "as soon as the engineering opinion of the industry is prepared to approve any one of the competing systems of broadcasting as the standard system." After a meeting with the FCC Chairman, James L. Fly, Baker agreed to organize and chair the NTSC in an effort to reach a consensus. Over the next several months, 168 members devoted approximately 4000 person hours to meetings and compiled approximately 600 000 words of reports and minutes. At its final meeting on March 8, 1941, the NTSC changed its recommendation on the number of lines from 441 to 525. This was a compromise, suggested to Baker by Donald G. Fink, between the 441 lines favored by RCA and 800 lines preferred by Philco. The NTSC standards

became the basis for an explosive growth in the industry after WW II, and there were approximately 31 million monochrome television receivers and 416 transmitting stations in the United States by November 1954.

Baker served as president of the Institute of Radio Engineers in 1947 and then chaired the second NTSC from January 1950 until its final meeting in July 1953. The FCC adopted this committee's recommended standards for compatible color television and authorized commercial broadcasting under these standards beginning in January 1954. Baker became interested in the educational potential of television and published a paper on the subject in 1954. He contended that the pace of technological change had tended to overwhelm the educational system and that television might be used to facilitate learning because of its visual impact. He retired from GE in 1957 and died in 1960. Fink wrote that "too much credit for the enduring quality of television broadcasting cannot be given" to Baker.

A process is currently underway to formulate standards for a proposed high definition television (HDTV) service that is quite reminiscent of the process followed by Baker and the NTSC committees. Recent reports indicate that a digital HDTV system is a strong contender for a proposed simulcast HDTV standard mandated by the FCC. In this system one channel would continue to carry the existing NTSC signal while a second would carry a digital signal that could only be received on HDTV receivers. FCC testing of several HDTV systems is now underway, - although a decision on an HDTV standard is not anticipated before 1993. Perhaps someone with Baker's skills at conflict resolution will emerge to provide leadership in reaching a new consensus.

*James E. Brittain
School of History, Technology, and Society
Georgia Institute of Technology*

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IEEE, c/o Cinergy Corp.

P.O. Box 960, Room 552 Annex

Cincinnati, Ohio 45201

Ph. (513) 287-3697, Fax (513) 287-3698

e-mail: j.r.morrison@ieee.org

HELP NEEDED IN DOCUMENTING HISTORY OF THE CINCINNATI SECTION

Were you a former chairman or officer of the Cincinnati Section of IEEE? If you were and have files on or remembrance of the section's activities, I would like to hear from you or receive a reply by mail or E-mail on the following:

- When were you chairman or an officer, and position you held if not chairman?
- Who preceded you and who followed you in the position?
- What was the average attendance at the meetings?
- Activities such as working groups or study groups?
- Significant people and events?
- Any AIEE vs. IRE rivalry?
- How well did the section serve the membership? Did the section enrich the members skills or stimulate learning?
- Favorite program or activity?
- Especially needed is information in the sixties, seventies and early eighties

I can be reached by mail at R.J. Reiman, 5263 Pro's Drive, West Chester, Ohio 45069-1880 and by E-mail at rj.reiman@ieee.org

Thanks for your help!
Dick Reiman

IEEE NEWS

FY 2002 BUDGET PROPOSAL PUTS BRAKES ON R&D GROWTH

President Bush submitted the "blueprint" of his \$2 trillion FY 2002 budget proposal to Congress in February. Consistent with the President's pledge to slow federal spending, the proposal would significantly reduce federal support of research and development, especially for non-defense engineering and health-related programs. The cuts are proposed in favor of increased spending on education and defense, and to ease the passage of Bush's proposed broad tax cut.

Among the notable reductions proposed under the Bush plan, the \$190 million Advanced Technology Program would be cut from the Commerce Department budget, and initiatives to bridge the "digital divide," by providing computers and Internet access to underprivileged families and schools, would be reduced by 65 percent. In contrast, the NIH budget would receive an increase of 15 percent, or \$2.8 billion. And funding for e-government initiative, FirstGov, would be ramped up from \$10 million to \$100 million over three years. The FirstGov portal (www.firstgov.gov) was established by the Clinton Administration to act as a gateway for accessing the Federal Government's numerous agencies online. A big improvement in education would be the expansion of the Education Savings Accounts from \$500 to \$5000, and expansion of tax exemption to all prepaid college tuition plans, not just those at public schools.

Congress now has until September to reach a compromise with the Bush Administration on the proposal. Check out the latest on the budget at: <http://www.whitehouse.gov/omb/budget/text/index.html>.

IEEE-USA supports increases in federal R&D funding -- especially for support of applied research, engineering and the physical sciences in both the civilian and defense agencies. IEEE-USA urges concerned individuals and groups to contact Congress in support of the R&D budget. Find out how at the IEEE-USA Legislative Action Center: <http://congress.nw.dc.us/ieee/>.

IEEE-USA ENDORSES ENERGY RELIABILITY LEGISLATION

IEEE-USA sent a letter, dated 6 March, to the House and Senate Energy Committees expressing support for "prompt passage of legislation to promote and ensure the continued reliability of the electric grid in the United States and throughout North America." The IEEE-USA Energy Policy Committee (EPC) is monitoring closely several key pieces of legislation being considered by the 107th Congress that would address the three basic concerns it sees with the present state of the country's power grid:

- The ongoing decline in the quality and reliability of electric power will seriously impact the nation's economy
- No individual state is large enough to simultaneously assure the economic efficiency and reliable operation of the electric power infrastructure
- Reliability and economic efficiency can only be achieved at the regional and national level

Read the full letter on-line at: <http://www.ieeeusa.org/forum/POLICY/01march06.html>

For more information on the EPC and IEEE-USA's policy activities, visit: <http://www.ieeeusa.org/forum>

ORDER YOUR 2001 IEEE-USA SALARY & FRINGE BENEFITS SURVEY NOW

The IEEE-USA Salary & Fringe Benefits Survey, 2001-2002 Edition, can be ordered now at the special IEEE member pre-publication price of \$64.95. The definitive salary and reference guide for technical professionals, the survey is being conducted on-line this year for the first time. The number of members being surveyed has more than doubled to 80,000, which promises to yield more useful data for the report. Scheduled to be shipped in May, the regular member price of \$74.95 will take effect (\$149.95 for non-members) at that time. To order, call 1-800-678-IEEE (4333), and ask for UH-2990.

REGISTER NOW FOR THE 2001 IEEE-USA CONSULTANTS DATABASE

Get your consulting practice off to the right start this year by registering for the 2001 IEEE-USA Database of Electrotechnology and Information-Technology Consultants. Last year, more than 30,000 visitors searched the consultants database on the Web -- a 100 percent increase over 1999. Register now at www.ieeeusa-consultants.org to establish or renew your listing in the database for one year. Cost remains only \$65 for IEEE members (\$90 for non-members). As a bonus, registrants who enroll by May 1 will receive two copies of the database on CD-ROM, at no extra charge -- a great tool for using the database while traveling, and the perfect "give-away" to a prospective client.

IEEE-USA WORKSHOP SET FOR APRIL 27-29

IEEE-USA committees and PACE volunteers will meet April 27-29 in Tampa, Fla. to discuss professional activities, skills, services, government relations programs, and upcoming projects. IEEE-USA expects that this workshop will serve to:

- Develop PACE project plans and metrics to be implemented at the local section or chapter level
- Improve dissemination of information, products and services to local sections and chapters throughout the PACE network
- Provide PACE network leaders with new skills for successful meetings with legislators
- Develop a Grassroots Lobbying Network within PACE

For more information, visit: <http://www.ieeeusa.org/conferences/2001workshop/index.html>

JOIN US FOR 2001 CONGRESSIONAL S&T VISITS DAY

IEEE-USA asks the IEEE's U.S. members to join hundreds of other engineers and scientists for 2001 Congressional Visits Day (CVD), May 1-2 in Washington, D.C. CVD stresses the long-term importance of science and technology to the nation's health and economy through meetings with congressional decision-makers.

IEEE-USA's Technology Policy Activities Council will coordinate meetings on the Hill for participating IEEE members. CVD provides an excellent opportunity for new IEEE volunteers with an interest in public policy to get involved with IEEE-USA's government relations. To volunteer for 2001 Congressional Visits Day, or for more information, visit <http://www.ieeeusa.org/forum/cvd/index.html> or contact Deborah Rudolph at d.rudolph@ieee.org

E-WEEK'S 50TH ANNIVERSARY CELEBRATION HIGHLIGHTS

In February, the nation's capital played host to a number of events centered around the 50th anniversary celebration of National Engineers Week (E-Week). Every year, E-Week unites engineers from all disciplines for a weeklong, nationwide celebration of the countless ways engineers touch the lives of all Americans. Some highlights:

- The National Academies of Engineering presented their top awards at a gala black-tie ceremony at Union Station, in Washington, D.C. The \$500,000 Charles Stark Draper Prize, often referred to as the Nobel Prize of engineering, was awarded to the inventors of the Internet, Vinton Cerf, Robert Kahn, Leonard Kleinrock and Lawrence Roberts. Cerf, Kahn and Kleinrock are all IEEE Fellows. The new biennial Dolores H. Russ Prize, also worth \$500,000, was presented to Earl Bakken and Wilson Greatbatch for their invention of the first human pacemaker. For more information, visit: <http://nationalacademies.org/>

- The 21 Future City Competition regional finalists met in the capital to compete for the national championship. St. Barnabas Catholic School (Chicago, IL) took top honors for their design -- "Maropolis" -- a floating city of the future built on a platform ship five miles square. Medford (Okla.) Public School took home the inaugural IEEE-USA Best Communications System Award, presented by IEEE-USA President Ned R. Sauthoff and David Pierce, IEEE-USA PACE Committee Chair. For more E-Week coverage, visit: <http://www.ieeeusa.org/eweek/>

- The E-Week organizers launched an online travel guide -- A Sightseer's Guide to Engineering -- at <http://www.engineeringsights.org>. The Guide is designed to help kids and adults add some engineering wonders to their vacation itineraries. IEEE-USA enlisted the help of the IEEE History Center, which submitted several dozen sites for consideration -- many of which appear in the Guide. Visit the IEEE History Center online at: http://www.ieee.org/organizations/history_center/index.html

- In a special Presidential Message concerning the observation of National Engineers Week (February 18-24), President George W. Bush praised engineers, noting that "these dedicated men and women continue to lead our Nation to a better future." Read the letter at: <http://www.eweek.org/2000/News/Features/bush.shtml>

IEEE FOUNDATION COMMITS FUNDING FOR SECOND 2001 S&E MASS MEDIA FELLOW

At its March meeting, the IEEE Foundation's Board of Directors allocated an additional \$78K to fund projects addressing a number of goals, including "improving the public's understanding and appreciation of engineering." Responding to that initiative, the Foundation awarded an \$8K grant to IEEE-USA. The grant allows the IEEE-USA Communication Committee to sponsor two students in the AAAS Mass Media Science and Engineering Fellows Program in 2001.

The program's goal is to strengthen the connection between science and the media, and to enhance coverage of science-related issues in the media in order to improve the public understanding and appreciation of science and technology. For a ten-week period each summer, the program places advanced science and engineering students in media outlets throughout the country to work as reporters, researchers and production assistants. IEEE-USA's first Media Fellow, Elan Ruskin, spent last summer working as a cub reporter for the St. Louis Post-Dispatch, covering a vast array of sci/tech issues. For more information on the Media Fellows Program, visit: <http://ehrweb.aas.org/ehr/MassMedia0719.html>

ENGINEERING A BETTER QUALITY OF LIFE: AD CAMPAIGN

Throughout the month of February, the American Association of Engineering Societies (AAES) will place a series of seven ads in newspapers throughout the country. One of the key objectives of the ad campaign is to improve public perception of engineers of all disciplines by highlighting engineering contributions to the quality of life. The ads emphasize the role engineers play in enhancing health care, improving the environment, and making our homes and workplaces safer and more comfortable.

As a member society of AAES and the AAES Engineering Alliance, IEEE-USA is pleased to have been able to participate in the planning and funding of this important public awareness effort. To find out more, visit: <http://www.aaes.org/content.cfm?L1=3&L2=1>

INVENTION DIMENSION: SCIENCE, ENGINEERING AND ENTREPRENEURSHIP

The Lemelson-MIT Program is an MIT-administered program launched in 1994 by the late Jerome H. Lemelson and his wife, Dorothy. According to the program's website, called Invention Dimension, the program's mission is "to inspire a new generation of American scientists, engineers and entrepreneurs by celebrating, through awards and educational activities, living role models in these fields." Invention Dimension serves as a clearinghouse for information about inventors and inventing, and can be found at: <http://web.mit.edu/invent>

IEEE-USA IS ASKING MEMBERS TO WRITE THEIR U.S. REPRESENTATIVES IN SUPPORT OF THE PORTMAN-CARDIN RETIREMENT SECURITY AND PENSION REFORM ACT (H.R. 10)

Representatives Rob Portman (R-Ohio) and Ben Cardin (D-Md.) reintroduced their Comprehensive Retirement Security and Pension Reform Act (H.R. 10) in the U.S. House of Representatives on March 14, 2001. This bill, which enjoyed broad bipartisan support in the last Congress, passed the House, not once but twice (401 to 25 on July 19th and 401 to 20 on September 19th). The pension reform provisions were also included in an omnibus House-Senate tax relief package that was debated (but not enacted) in the closing days of the 106th Congress.

The new Portman-Cardin bill would:

- Increase the current law \$2,000 contribution limit (established in 1981) for deductible and non-deductible IRAs to \$5,000 in \$1,000 annual increments;
- Increase 401(k), 403(b), Section 457 and salary reduction SEP contribution limits from \$10,500 to \$15,000 and SIMPLE contribution limits from \$6,000 to \$10,000;
- Allow older workers to make "catch-up" contributions of up to \$5,000 a year to 401(k) type plans and up to \$1,500 to IRAs;
- Reduce vesting requirements for employer matching contributions to defined contribution plans from 5 to 3 years and improve pension portability by facilitating transfers of earned benefits among and between DC plans and IRAs;
- Promote expanded pension coverage by simplifying complex minimum distribution, non-discrimination and top-heavy rules; and
- Mandate expanded disclosures about plan amendments that will reduce benefit accrual rates in conversions from defined benefit plans to cash balance plans.

The bill does not currently address issues related to wear-away of retirement benefits during cash balance pension plan conversions, although it is expected that related provisions will be added in the Senate.

The new Portman-Cardin proposal will probably be moved as a free standing bill and added later to President George W. Bush's tax relief package, parts of which have already been passed by the House. A companion bill is also expected to be introduced shortly in the Senate by Sens. Chuck Grassley (R-Iowa) and Max Baucus (D-Mont.).

You can read the full Action Alert on-line at: <http://congress.nw.dc.us/cgi-bin/alertpr.pl?dir=ieee&alert=124>

And/or send a letter to your Representative through IEEE-USA's Legislative Action Center at: <http://congress.nw.dc.us/ieeeusa>

Please share this Alert with other interested Members.

For more information, contact Vin O'Neill, IEEE-USA Senior Legislative Representative for Career Policy issues at v.oneill@ieee.org and/or visit our Retirement Security Grassroots Network on-line at: <http://www.ieeeusa.org/forum/grassroots/pensions/index.html>

IEEE Accelerated Stress Testing Tutorial CD-ROM Now Available

PISCATAWAY, NJ (March 23, 2001) - Accelerated Stress Testing, an IEEE Educational Activities joint CD-ROM tutorial production with the IEEE Reliability Society is now available. Learn how to get started with AST, from reducing cycle time to deciding on stress levels.

Accelerated Stress Testing, AST, has become mandatory in order to meet time-to-market and product quality needs. AST has been shown to ferret out problems that would otherwise plague the customer in the field. One study demonstrated that AST was able to reduce Printed Wiring Board failures by almost two orders of magnitude compared to a control sample. AST uncovers problems before they are shipped to the customer, thereby rapidly maturing the product and demonstrating diligence protecting the customer. Today's market place demands and rewards such diligence.

This tutorial provides fundamentals for reliability and test engineers and is supported by case studies from four expert practitioners and a panel discussion about practical implementation issues. Dr. Samuel Keene, a recognized international resource in the R & QA field, introduces presenters who are well qualified and broadly known in their fields. The learner is able to access the following sections:

H. Anthony Chan, AT & T Labs, covers stress testing at the design, component and test levels as well as problems at the customer level.

Charles Felkins, Storage Techniques, describes the components of highly accelerated life test and highly accelerated stress screening.

Paul Parker, Lucent Technologies, Texas, covers test equipment for power monitoring, thermal/vibration equipment and environmental analysis accessories.

Anthony Oates, Lucent Technologies, Florida, includes discussions of circuit reliability models, early failure rate characterizations, IC wearout failure mode and package/assembly failure model.

Panel discussion covering the most frequently asked questions, including comments on professional development and customer relations.

The single CD-ROM, gives full access to the four power point presentations and the panel discussion. It uses functions from the Internet tool bar as well as built in features such as jump, search, and scroll capabilities, navigation, full audio, and an MPEG player video component with full complimentary transcript. The transcript provides extra support for users with non-English as their primary language.

Software Requirements: Windows 95, 98, NT or 2000; Internet Explorer 4.0 (or higher), or Netscape Navigator 4.0 (or higher); Windows Media Player 6.1 (or higher), or RealPlayer G2, version 6.0.5.27 (or higher) Hardware Requirements: Pentium 200 MHz processor; 32 MB RAM; Windows compatible sound card; 4x CD-ROM drive (for CD-ROM delivery)

EC 133:1 CD ROM, PC compatible only, \$700 member; \$875 non-member. HV 7061: 3 videotapes & presentation notes; same price, NTSC only.

The CD-ROM and video set can be ordered from the IEEE Customer Service Department, 445 Hoes Lane, PO Box 1331, Piscataway, NJ 08855-1331, USA; by e-mail: customer-service@ieee.org; by phone: 1.800.678.4333; and on the Web at <http://shop.ieee.org/store/> For further information on Education Activities check out our Website <http://www.ieee.org/organizations/eab/index.htm>.

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